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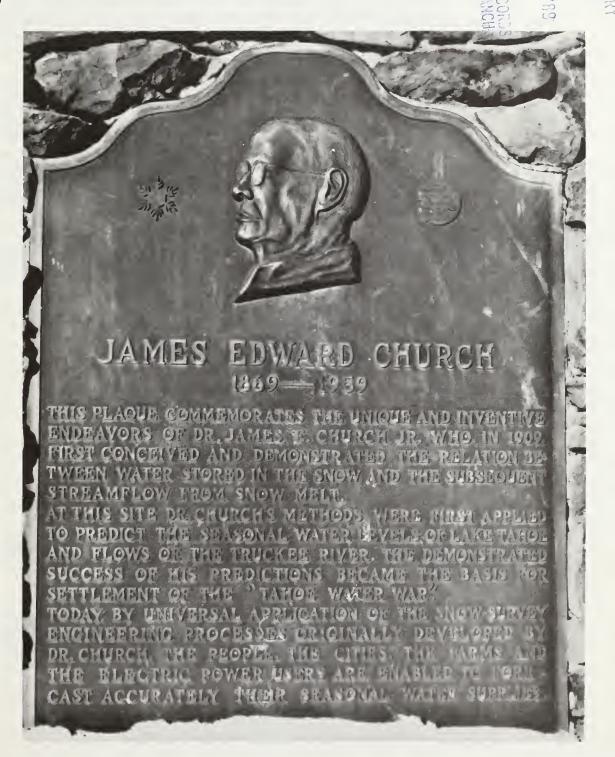
Soil Conservation Service

Spokane, Washington



Washington Water Supply Outlook

APRIL 1, 1989



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Washington Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

Issued by

Wilson Scaling Chief Soil Conservation Service Washington, D.C.

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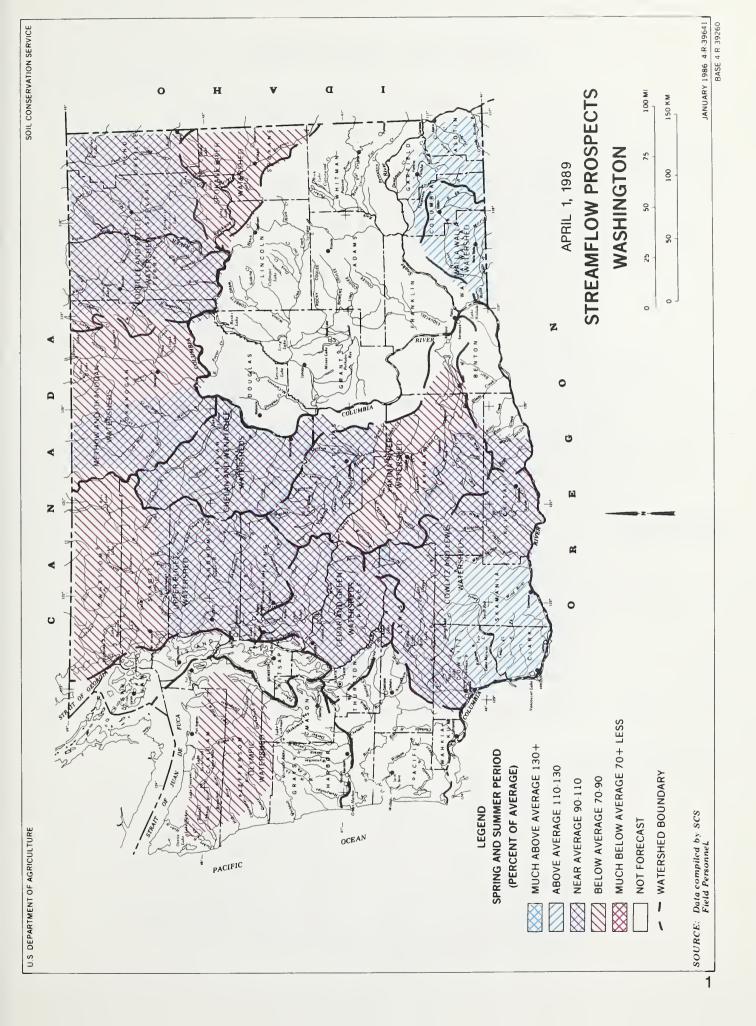
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GENERAL OUTLOOK

SUMMARY:

SNOWPACK. AS A PERCENT OF NORMAL, INCREASED OVER THE STATE AND VARIED FROM 113% IN THE WALLA WALLA TO 85% IN THE OLYMPIC BASIN. RUNOFF FOR 1989 IS FORECASTED TO BE AVERAGE OVER MOST OF WASHINGTON. THESE FORECASTS VARY FROM 117% ON THE LEWIS RIVER TO 82% ON THE YAKIMA RIVER. MARCH STREAMFLOWS VARIED FROM 57% OF NORMAL ON THE OKANOGAN RIVER TO 165% FOR THE WALLA WALLA RIVER. RESERVOIR STORAGE REMAINS BELOW NORMAL AT THE MAJOR IRRIGATION PROJECTS THROUGHOUT THE STATE, WITH THE RESERVOIRS IN THE YAKIMA BASIN 82% OF NORMAL. PRECIPITATION WAS ABOVE NORMAL OVER MOST OF WASHINGTON FOR MARCH WITH ONLY THE OLYMPIC WITH 97% BELOW AVERAGE AND THE WALLA WALLA WAS HIGH WITH 222%. TEMPERATURES VARIED DURING MARCH WITH THE GREEN THREE DEGREES BELOW NORMAL AND THE WALLA WALLA BASIN THREE DEGREES ABOVE.

NOTE: NEGATIVE TERMS THAT APPEARED IN THE MARCH REPORT WERE IN ERROR, THERE SHOULD BE NO DATA WHERE THE "-" IS SHOWN.

SNOWPACK:

Snowpack averages increased in most areas of Washington during March. The Cedar Basin at 123% of average was the best. Along the west slopes of the Cascade Mountains, the Lewis-Cowlitz Basin was 109% up from 96% and the Walla Walla Basin was 113%. The Fastern slopes of the Cascade Mountains are higher with the Yakima Basin at 94% up from 86% and the Chelan-Wenatchee at 92% of normal. Maximum snow cover is at the Paradise snow pillow with 82.9 inches of water content on the ground. This site normally would have 71.2 inches of water content.

PRECIPITATION:

SNOTEL sites in Washington showed the high elevation year-to-date precipitation values to be 95% of average, down from 96% last month. Precipitation was above normal over most of Washington for March. The Olympic was the only basin with below average precipitation at 97% of normal. Some of the above normal basins were the Spokane at 162%, the Colville-Pend Oreille at 165%, and the Chelan-Wenatchee at 121% of normal. Some values in the West Cascade Basins include North Puget at 118%, White-Green at 143% and the Lewis at 154%.

RESERVOIRS:

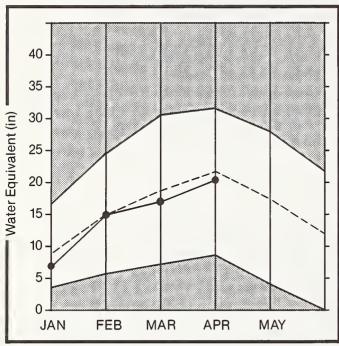
There was an overall improvement in the storage at major state reservoirs for April 1. Storage in the Yakima Basin was 605,600 acre feet, 82% of average, up from 542,600 acre feet, 78% of average. Other major reservoir storage include Roosevelt at 10% of normal, down from 36% last month. Banks Lake is at 114% and the Okanogan reservoirs are at 99% of April 1 average. The power reservoirs contain the following: Coeur d'Alene Lake 243,200 acre feet 104% of normal, Chelan Lake 200,600 acre feet at 95%, down from 239,300 last month, and Ross Lake at 703,900 acre feet, 223% of average.

STREAMFLOW:

Near normal temperatures and low elevation rainfall during March increased the streamflow on streams in Washington. March streamflows were below normal in most areas of Washington. Streamflow varied from 57% on the Okanogan River and the maximum of 165% from the Walla Walla River. On the west side of the Cascade Mountains, runoff from the Chehalis was 122% and the Skagit 66% of normal. The eastern slope of the Cascades runoff on the Yakima was 71% of average. The Columbia River was 79% at the International Border and 88% below Priest Rapids. April 1 streamflow forecasts vary from 117% in the Lewis River to 82% in Yakima River. Forecasts for some west side streams include: Cedar River 100%, Skagit River 88%, up from 83% last month and the Dungeness River 88%. Some east side streams include the Yakima River at Cle Elum 88%, the Methow River 95% and the Wenatchee River 95% up from 91% last month.

SPOKANE

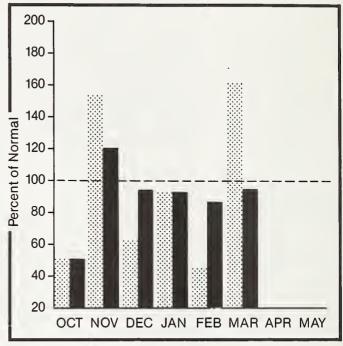
Mountain snowpack* (inches)



*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

SPOKANE RIVER BASIN

WATER SUPPLY OUTLOOK:

Precipitation for March was 162% of average. water again occurred at the Lost Lake snow with 146 inches of snow with 47.3 inches of content, April 1 average for this site is 59.3 Forecasted runoff for the Spokane River Basin is 89% of normal for the coming spring and This forecast is based on a snowpack 92% of average and a water year-to-date precipitation value Streamflow during March on the Spokane River was 106% of average at Spokane. 1 storage in Coeur d' Alene Lake was 243,200 acre average storage feet compared to 220,900 last month; in Coeur d'Alene for April 1 is 234,300 acre feet. Temperatures averaged one degrees below normal during March.

SPOKANE RIVER BASIN

		STPE4	MFLOW FORECA	STS				
FORECAST FOINT	FORECAST	MOST FROBABLE	MOST PROBABLE	WET SUBS.		FEAS,	REAS:	Z5 YR. AVG.
	F'ER:IOD	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)
		7.3	Sach					
SPOKANE or Post Falls (2)	APR-SEP APR-JUL	2510 2420	89 89	2790 2750	2230 2090	3190 3070	1830 1770	2820 2723
	HFK-JUL	2920	57	2/30	2070	3070	1770	4/43
SPOKANE at Long Lake	AFR-JUL	2710	89			3560	1860	3045
		10						
	RESERVOIR STORAGE	(1000AF)	 	WATE	ERSHED SNOWPA	CK ANALYSIS	
DEADER!	USEABLE I		BLE STORAGE			ilO		YEAR AS % OF
PESERVOIR	CAPACITYI I		LAST YEAR #	ANG+ I HATE	RSHED		RSES LAST	YR. AVERAGE
COEUR D'ALENE	291.2	243.2	194,2 2	14.3 Spok	ane River	15	140	98

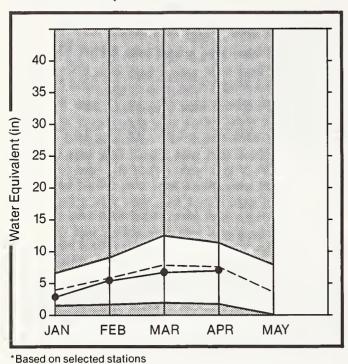
MET SUBS, and DRY SUBS, represent 150 and 50 percent subsequent precipitation events respectively. REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

(2) - Corrected for upstream diversions or changes in reservoir storage.

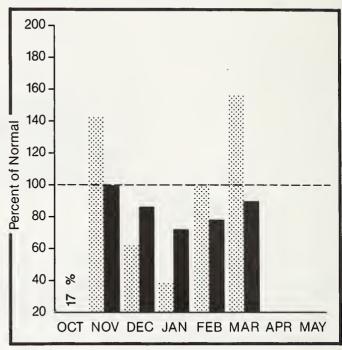
COLVILLE - PEND OREILLE

Mountain snowpack* (inches)

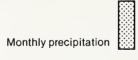




Precipitation* (percent of normal)



*Based on selected stations



Year to date precipitation

COLVILLE - PEND OREILLE RIVER BASINS

WATER SUPPLY OUTLOOK:

Forecast for the Pend Oreille River streamflow is 98% normal for the summer, this is an increase from The Colville River is forecast for 89% last month. 93% of normal for the summer runoff period. snow cover is 92% of normal on the Pend Orelle and Kettle and 98 % on the Colville. Snowpack at Bunchgrass Meadow snow course was 90 inches of snow with 29.4 inches of water. Precipitation during March was 165% of average. bringing the water yearto-date to 89% of normal. Streamflows for March were 77% of average on the Pend Oreille River, 71% on the Kettle River and 79% on the Columbia River at the International Border. Temperatures averaged near normal for March.

COLVILLE - PEND OREILLE RIVER BASIMS

STREAMFLOW FORECASTS

FORECAST FOINT	FORECAST	MOST	MOST PROBABLE	HET			PEAS. MIN.	25 YR. AVG.
FORECHS! FOLK!						(1000AF)		(1000AF)
PEND OREILLE bl Box Canvon (2)	AFR-SEF	14800	98			17700	11900	15170
	APR-JUL	13600	98			16200	10800	13900
	APE:-JUN	11700	98			14000	9430	11960
CHAMOKAME CK or Long Lake	MAY-AUG	8.2	89			11.8	4,6	9,2
COLVILLE at Kettle Falls	APR-SER	129	93			183	75	139
	APR-JUL	119				169	69	128
	APR-JUN	110	V. (2000)			156	64	118
KETTLE no Laurier	AFR-SEP	1770	93			2280	1270	1907
	APP-JUL	1680	93			2170	1190	1807
	AFR-JUN	1510	93			1950	1070	1677
COLUMBIA at Birchbank (2)	APR-SER	42400	96			47700	37100	44390
	APR-JUL	33900	96			37800	29600	35440
	APR-JUN	24600	96			27200	21500	25650
COLUMBIA at Grand Coulee Dam (2)	APR-SEP	64000	96			72600	56000	66460
	APR-JUL	54100	97			60200	46900	55730
	APE-JUN	41700				47300	36900	43420
					er om enn mar ben om enr mer en en.		0 000 000 000 day day day day day day day	
RESERVOI	R STORAGE		1000AF)	1	!	MATERSHED SMOWER	ACK ANALYSIS	
	USEABLE !	** USE/	ABLE STORAGE	,				YEAR AS % OF
RESERVOIR	CAPACITY	THIS		I WATE		COL		

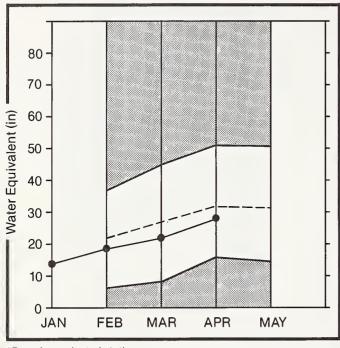
	RESERVOIR STORAGE		(1000AF)	!	HATERSHE	D SNOWFACK ANA	LYSIS	
RESERVOIR	USEABLE CAPACITY 	** US THIS YEAR	EABLE STO LAST YEAR	RAGE ** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR	: AS % OF AVERAGE
F:00SEVELT	5232.0	503.0	1715.5	1586.0	Colville River	3	133	98
BANKS	715.0	664.2	650.7	583.0	Fend Oreille River	12	121	92
		Pic.	** ***********************************		Kettle Fiver	10	125	91

MET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively. REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

REAS, MAX, and FEAS, MIN, forecasts are for 5% and 95% exceedance levels.
 Corrected for upstream diversions or changes in reservoir storage.

OKANOGAN AND METHOW

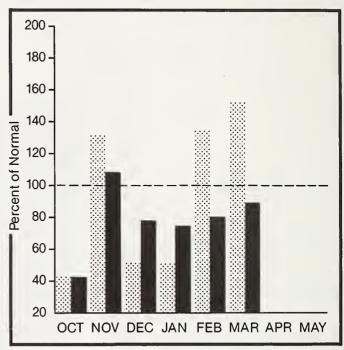
Mountain snowpack* (inches)







Precipitation* (percent of normal)



*Based on selected stations



Year to date precipitation

OKANOGAN - METHOW RIVER BASINS

WATER SUPPLY OUTLOOK:

Storage in the Conconully Reservoirs is 14.900 acre feet, which is 64% of capacity and 99% of April 1 Summer runoff forecasted for the Okanogan average. River is 85% of normal, up from 76% last month. Similkameen River 89%, up from 77% last month and the Methow River is 95% of normal. Okanogan River streamflow was at 57% of average for March while the Similkameen River averaged 65%, Snow cover, as of April 1, is 88% of average on the Okanogan-Methow This is based upon measurements made at 32 snow courses and SNOTEL sites. March precipitation in the Okanogan-Methow was 151% of normal, with water year-to-date 88% of average. Temperatures were two degrees above normal for the month. Maximum snow water occurred at the Harts Pass SNOTFL, elevation 6500 feet, with 42.9 inches of water.

STREAMFLOW FORECASTS

			. 					
FORECAST FOINT	FORECAST PERIOD	MOST PROBABLE	MOST PROBABLE (% AVG.)	MET SUBS, (1000AF)	DRY SUBS. (1000AF)	REAS, MAX, (1000AF)	FEAS. MIN. (1000AF)	25 YF. AVG. (1000AF)
		(1000HF)	(% HVG+/	(1000HF)		(1000HF)		(1000HF)
		50.75						
SIMILFAMEEN F. or Nighthawk	APR-SEP	1270	89	1430	1080	1630	910	1432
	APR-JUL	1180	89	1330	1010	1510	845	1333
	4FE-104	1020	90	1120	850	1300	740	1128
OKANOGAN R. or Tonesket	APR-SEP	1420	85	1820	1250	1980	855	1661
	AFR-JUL	1280	85	1640	1130	1790	770	1501
	APR-JUN	1080	86	1370	940	1510	655	1255
METHOW RIVER on Pateros	APR-SEP	935	04	975	790	1190	ė80	980
HEIMOR KIVER III 1 SCELOS	AFR-JUL	865	95 95	900	730	1100	630	907
	APF-JUN	740	96	765	615	940	540	769
							2.7	1 00 1
	-			. 				
RESERV	VOIR STORAGE		(1000AF)	i	WAT	ERSHED SNOWPA	CK AMALYSIS	
	USEABLE I		ABLE STORAGE			i40 .		YEAR AS % OF
RESERVOIR	CAPACITY! I	THIS YEAR	LAST YEAR	ANC' I MULE	ERSHED	AV0	KSES 'D LAST	YR. AVERAGE
CONCONULLY LAKE (SALMON)	10.5	8,0	7.4	8.0 Okar	nogan River	27	116	89
CONCONULLY RESERVOIR	13.0	6.9	6.0	7.0 Meti	now River	1/2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	81
		W. C.					697 - GASSON	Marine Bridge Mills

WET SUBS, and DRY SUBS, represent 150 and 50 percent subsequent precipitation events respectively.

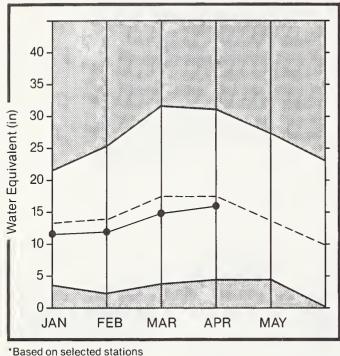
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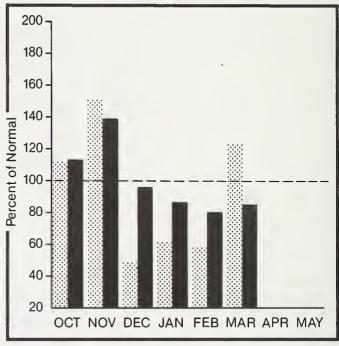
(2) - Corrected for upstream diversions or changes in reservoir storage.

WENATCHEE AND CHELAN





Precipitation* (percent of normal)



*Based on selected stations



Monthly precipitation

Year to date precipitation

WENATCHEE AND CHELAN RIVER BASINS

OUTLOOK:

WATER SUPPLY Snowpack in the Wenatchee-Chelan Basin is 93% of normal. Lyman Lake SNOTEL had the most snow water with 60.1 inches on April 1. Runoff for the Wenatchee River is forecast to be 95% of normal for the summer, up from 91% last month. Forecasts in the Chelan River are for 95% up from 87% last month. March streamflow within the basin was 58% of normal on the Wenatchee and 82% on the Chelan River. Precipitation during March was 121% of normal in the basin and 84% from October 1 to April 1. storage in Lake Chelan is 200.600 acre feet or 95% of April 1 average and 16% of capacity.

MENATCHEE - CHELAN RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD		MOST PROBABLE (% AVG.)	≗ET SUBS. (1000AF)		FEAS. MAX. (1000AF)	REAS. MIN.	25 YE. AVG. (1000AF
		(1000AF)	(/s HVG+)	(1000AF)		(1000AF)	(1000HF)	(1000AF
	100.000	4400	0.5	44.00	4070	4050	000	4.05
CHELAN RIVER at Chelan 1	APR-SEP	1120	95	1180	1070	1250		1182
	APR-JUL	985 775	95 95	1040 815	945 740	1100 920	870 430	1046 815
	APR-JUN	7/3	73	813	749	740	030	815
STEHEKIN R. at Stehekin	APR-SEP	800	95	840	760	895	705	844
	APR-JUL	675	95	710	645	755	595	714
	APR-JUN	515	95	535	490	575	455	541
ENTIAT FIVER or Ardenvoir	AFR-SEP	210	90	245	177	250	168	233
	APR-JUL	200	90	230	169	240	160	221
	APR-JUN	155	91	179	131	186	124	171
MENATCHEE R. at Peshastin	APR-SEP	1590	95	1670	1360	2110	1070	1678
	APR-JUL	1450	96	1510	1220	1920	980	1516
	APR-JUN	1170	96	1220	975	1550	795	1216
STEMILT or Wenatchee (miners in)	MAY-SEP	128	93	145	105	172	84	138
ICICLE CREEK or Leavenworth	APR-SEP	335	91	385	320	455	215	370
TOTOTE CKEEK HIL TESAGHMOLON	APR-JUL	305	90	355	295	415	196	340
	APR-JUN	245	91	285	235	330	159	270
	HI IC OOK	L. M. G.	286.18	200	200	330	137	270
COLUMBIA P. bl Rock Island Dam 2	APR-SEP	69700	98			79100	60300	72250
	APR-JUL	59300	C . C . T . C .			67200	51400	61050
	APR-JUN	46300	97			52500	40100	47730
				1				
RESERVOI	R STORAGE	((1000AF)		HAT	ERSHED SNOWPA	ACK ANALYSIS	

	RESERVOIR STORAGE		(1000AF)	!	WATERSHE!	D SNOWPACK ANA	ALYSIS	
RESERVOIR	USEABLE CAPACITY 	** US THIS YEAR	EABLE STOR LAST YEAR	RAGE ** AVG.	WATERSHED	NO. COURSES AVG'D		AR AS % OF
CHELAN LAKE	676,1	200.6	106.2	212.1	Chelan Lake Basin	4	96	97
		Jen :		1	Entist River	1	94	93
					Menatchee River	7	100	92
		A ST.		3	Colockum Ereek	0 0 4	0	0
		3,223	even e	sames.	Squilchuck Creek	1	1030	137
					Stemilt Creek	2	315	105

WET SUBS, and DRY SUBS, represent 150 and 50 percent subsequent precipitation events respectively.

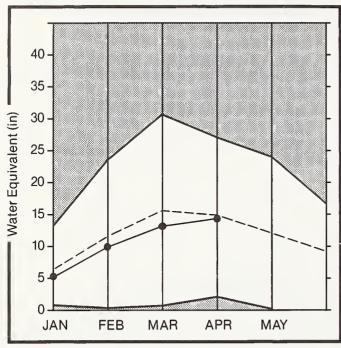
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(2) - Corrected for upstream diversions or changes in reservoir storage.

YAKIMA

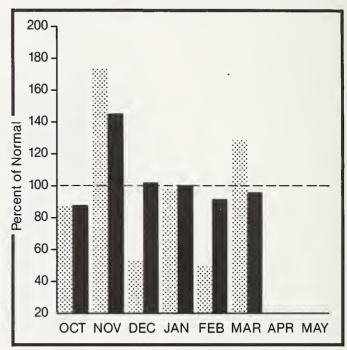
Mountain snowpack* (inches)



*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

YAKIMA RIVER BASIN

WATER SUPPLY OUTLOOK:

March streamflow for the Yakima Basin was 71% of Snowpack is 94% of average in the Yakima Basin based upon 20 snow course and SNOTEL readings. March precipitation was 129% of normal and 95% for April 1 reservoir storage the water year-to-date. for the five major reservoirs was at 605,600 acre feet or 82% of normal, up from 542,600 acre feet last Forecasts for the Yakima Basin runoff vary the Yakima River at throughout the basin as follows: Cle Elum 88% up from 86% last month, Naches River 83% up from 79%, the Yakima River at Parker 82% up from 79% and Ahtanum Creek 85%. March temperatures were two degrees below average.

Volume forecasts for the Yakima Basin are for natural flow. As such, they may differ from the U.S. Bureau of Reclamation's forecast for total water supply available which includes adjustments for reservoir operation and irrigation return flow.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST	HOST PROBABLE	MOST PROBABLE	HET SUBS.	₽₽Y SUBS₁	REAS, MAX,	REAS. MIN.	25 YF 4 AUG 24
TOREGREE FORK	PERIOD		(% AVG.)		(1000AF)		(1000AF)	(1000AF)
AKIMA RIVER at Martin 1	AFF-SEF	122	90	133	117	136	108	136
	AFR-JUL AFF-JUN	113 101	90 90	122 110	108 95	126 112	100 90	126 112
AKIMA RIVER at Cle Elom 2	APR-SEP	840	88	905	775	935	745	951
	AFR-JUL AFR-JUN	750 655	89 89	800 700	690 595	835 730	665 580	846 735
AKIMA FIVER om Farker Z	APR-SEP	1710 1530	82 82	1960 1750	1460 1310	Z100 1880	1320 1180	2075
	APR-JUL APR-JUN	1350	82	1550	1150	1660	1040	1862 1643
ACHESS RIVER or Easton 1	APR-SEP APR-JUL	114 98	86 86	125 106	102 89	129 111	99 85	133 114
	AFR-JUN	88	86	95	79	99	77	102
LE ELUM FIYER om Roslyn 1	ARR-SER ARR-JUL	430	94 94	460 410		480 435	380 345	459 41
	AF-F-JUN	330	93	355	305	370	290	353
UMPING RIVER or Nile 1	APR-SEP APR-JUL	123 113	88 88	130 119	116 107	148 136	97 89	13° 128
	AFR-JUN	93	88	99	89	114	97 7 <u>2</u>	126 106
MERICAN FIVER on Nile	APR-SEP APR-JUL	107 99	88 88	112 103	102 95	119 110	°5 88	121 112
	APR-JUN	83	88	87	79	92	74	94
IETON RIVER at Tieton 1	ARR-SEP ARR-JUL	205 175	84 84	225 192	183 156	260 220	151 129	244 208
	AFR-JUM	143		155	126	180	10¢	168
ACHES RIVER on Waches 2	AFF-SEF AFF-JUL	710 645	83 83	795 725	550 590	088 008	540 490	860 779
	AFR-JUN	550	82	615	505	685	415	667
HTANUM CREEK or Tampico 2	APR-SEP APR-JUL	42 38	89 88	47 43		59 53	25 23	47 43
	APR-JUN	33		37		46	19.7	37
RESERV	OIR STORAGE	(1000AF)	1 1	чат	ERSHED SMOHE	ACK ANALYSIS	
			ABLE STORAG			!i0		YEAR AS % OF
RESERVOIR	CAPACITY!	THIS YEAR	LAST YEAR	i Ma' AVG₊ I	TERSHED		JRSES G'D LAST	YR. AVERAGE
EECHELUS	157.8	118.6	64.8	110.0 Yal	kima River	15	5 118	93
ACHESS	239.0	115.2		187.0 Ah	tanum Creek	2	133	118
LE ELUM	436.9	249.7	93.3	290.0				
UMPING LAKE	33.7	11.4	17 x Z	11.0				
IMROCK	198.0	110.7	82.0	142.0				

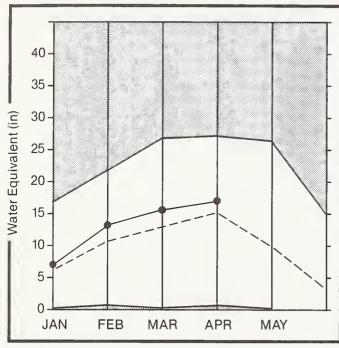
MET SUBS, and DRY SUBS, represent 150 and 50 percent subsequent precipitation events respectively. REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.

^{(2) -} Corrected for upstream diversions or changes in reservoir storage.

WALLA WALLA

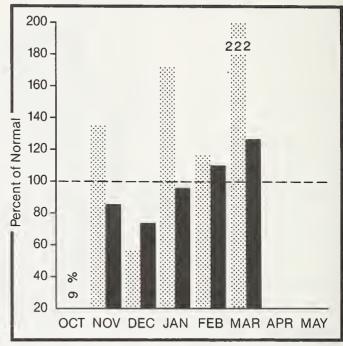
Mountain snowpack* (inches)



*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

WALLA WALLA RIVER BASIN

OUTLOOK:

WATER SUPPLY The forecast calls for 110% of average streamflow in the Walla Walla River for the coming summer. Streamflow for the Snake River was at 112% of normal for March and 165% on the Walla Walla River. snowback in the Walla Walla River Basin is 113% of March precipitation was 222% of average bringing the water year-to-date precipitation to 125% Water content at the Touchet SNOTEL site of normal. was 44.3 inches on April 1 up from 34.8 inches last Temperatures were three degrees above average for March.

MALLA MALLA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST			HET SUBS.	DPY SUBS.	PEAS.	WI14'	25 YE. AVG.
	PERIOD	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)
MILL CREEK at Walla Walla	APR-SEP	19,1	110	20	17.2	23	15,6	17.5
	APR-JUL	19.0	110	1947	17 + 1	22	15.5	17.3
	APR-JUN	17.0	111	19,5	16.3	22	15.6	17 + 1
SF WALLA WALLA nr MiltonFreewater	APR-JUL	61	111	6 [©]	54	70	52	55
COUSE CK or Milton Freewater	APR-JUL	3+8	106	4.6	3,0	4,0	2.7	3,6
PINE CREEK nr Weston	APR-JUL	3.0	111	3.4	2+6	3,8	2.2	2,7
COLUMBIA R. at The Dalles 2	APR-SEP	98800	95			112000	86000	102000
	APR-JUL	83300	96			94600	72000	87100
	APR-JUN	67600	96			76800	58400	70470
RESERVOI	STORAGE		(1000AF)			ERSHED SMOWPA	 ACK ANALYSIS	
				1				
RESERVOIR	USEABLE (ABLE STORAGE LAST		RSHEN		THIS	YEAR AS % OF
KESEKYGEK	CHI HETTI	YEAR		NG.	IN STILL			YR. AVERAGE
				Mill	l Creek		183	113

WET SUBS, and DRY SUBS, represent 150 and 50 percent subsequent precipitation events respectively.

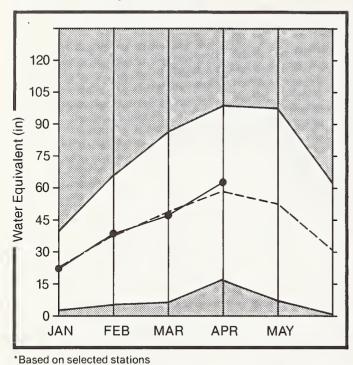
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(1) - REAS. MAX. and PEAS. MIN. forecasts are for 5% and 95% exceedance levels.

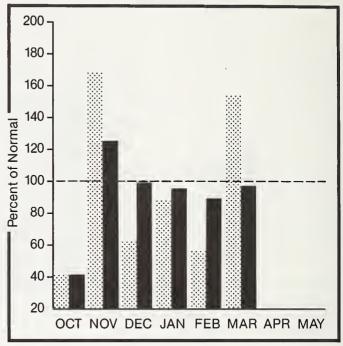
(2) - Corrected for upstream diversions or changes in reservoir storage.

COWLITZ AND LEWIS

Mountain snowpack* (inches)



Precipitation* (percent of normal)



*Based on selected stations



Monthly precipitation

Year to date precipitation

COWLITZ - LEWIS RIVER BASINS

OUTLOOK:

WATER SUPPLY March precipitation was 154% of normal bringing the water year-to-date precipitation to 97% of average. April 1 snow cover for the Cowlitz-Lewis Basin is The Paradise Park SNOTEL site has 109% of normal. the maximum water content for the basin with 82.9 inches of water on April 1. Summer runoff forecasts for the Lewis River are 117% and for the Cowlitz River 99%. Temperatures were normal for March,

COWLITZ - LEWIS RIVER BASINS

STREAMFLOW FORECASTS

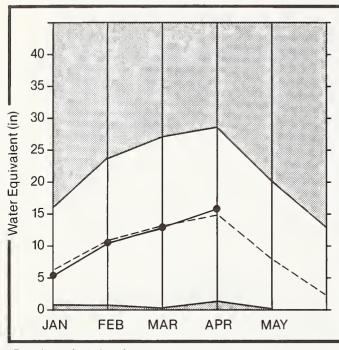
FORECAST POINT	FORECAST		MOST PROBABLE (% AVG.)	WET SUBS,	DRY SUBS.	REAS: MAX:	FEAS, MIN,	25 YE.
	PERIOD	(1000AF)	(% AV5+)	(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)
EWIS RIVER at Ariel 2	ADD CED	1460	117	1560	1250	1800	1120	1244
LEWIS KIVER ST HFIEL 2	APR-SEP APR-JUL	1270	117	1360	1090	1560	975	1084
	APR-JUN	1120	117	1200	965	1380	860	958
	HLV OOK	****	***	1200	703	1339	000	. 30
COWLITZ R. bl Mavfield Dam 2	APR-SEP	2010	99	2340	1640	2800	1220	2036
	APR-JUL	1760	99	2050	1440	2450	1070	1782
	APR-JUN	1510	99	1740	1220	2100	915	1524
COWLITZ R. at Castle Rock 2	APR-SEP	2570		2950	2170	3540	1600	2687
	APR-JUL	2240	96	2570	1890	3080	1400	2343
	APR-JUN	1940	96	2200	1620	2670	1210	2015
		43077						
			A. 30.00 A					
				1				
RESERV	OIR STORAGE	((1000AF)	1	НАТ	ERSHED SNOWPA	CK ANALYSIS	
	USEABLE I		ABLE STORAGE			. ом		YEAR AS % OF
RESERVOIR	CAPACITY		LAST		RSHED		IRSES	VD AUEDICE
	!	YEAR	YEAR /	AVG. I		9VA	.n rası	YR. AVERAGE
			100	Cowl	itz River	7	136	98
				1 1 2 1 2	s River	3	147	138

MET SUBS, and DRY SUBS, represent 150 and 50 percent subsequent precipitation events respectively. REAS, MAX, and REAS, MIN, forecasts are for 10% and 90% exceedance levels with the exception of (1) below.

^{(1) -} REAS, MAX, and REAS, MIN, forecasts are for 5% and 95% exceedance levels, (2) - Corrected for upstream diversions or changes in reservoir storage.

WHITE - GREEN

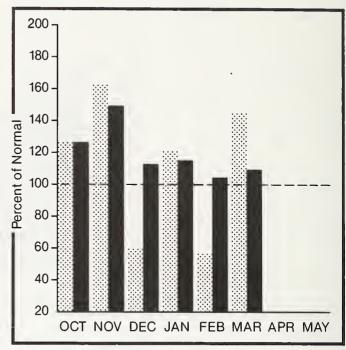
Mountain snowpack* (inches)



*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WHITE - GREEN RIVER BASINS

OUTLOOK:

WATER SUPPLY March precipitation was 143% of normal bringing the April 1 water year-to-date to 109% of average. snowpack is 105% of normal for the basin, up from 98% Summer runoff is forecasted to be 101% last month. on the Green River and 100% of normal and Cedar Snow water content at the Stampede Pass SNOTEL was 48.8 inches of water content on April 1. Temperatures were four degrees below average for March.

WHITE - GREEN RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD		MOST PROBABLE (% AVG.)			DRY SUB5. (1000AF)	REAS. MAX. (1000AF)	Ιή			25 YE. AVG. (1000AF)
GREEN RIVER bl Howard Hanson Dam 2	AFR-JUL AFR-JUN	265	101 102 102		300 270 285	285 255 190	355 315 285	1	35 15 93		291 261 236
CEDAR RIVER nr Cedar Falls	APR-SEP		1000AF)		101		ERSHED SWOWE				93
RESERVOIR	USEABLE I CAPACITYI	** USEA THIS YEAR		GE ** GE ** AVG	WATE	RSHED	CG	Ourses VG'D			AS % OF
		N. P			Whit	e River		2	132	3 () ·	103
					Gree	n River		5	121		116
					Ceda	r River		2	187		123

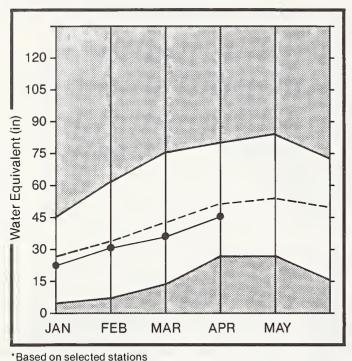
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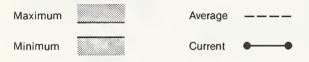
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(2) - Corrected for upstream diversions or changes in reservoir storage.

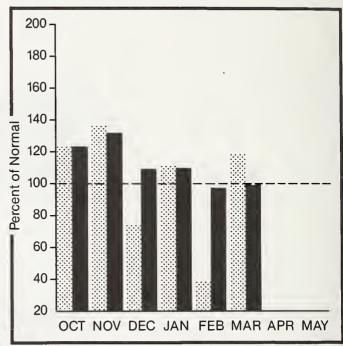
NORTH PUGET SOUND

Mountain snowpack* (inches)





Precipitation* (percent of normal)



*Based on selected stations



Year to date precipitation

NORTH PUGET SOUND RIVER BASIN

OUTLOOK:

WATER SUPPLY April 1 Reservoir storage was above average, with Ross Lake at 703,900 acre feet, 236% of normal and 50% of capacity. Precipitation values for March were 118% of average with a water year-to-date at 99% of March temperatures were average. normal. on the Skagit River during March was 66% of normal. Runoff for the Skagit River is forecasted to be 88% of normal, up from 83% last month. Snow cover for in the basin is 86% of normal, with Rainy Pass snow course, at 4780 feet, having 90 inches of snow and 33.8 inches of water content.

WORTH PUGET SOUND RIVER BASINS

		STREA	MFLOW FORECA	STS				
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)		WET SUBS: (1000AF)	DFY SUBS: (1000AF)	REAS. MAX. (1000AF) (1	REAS. MIN. LOOOAF)	25 YF. AVG. (1000AF)
SKAGIT RIVER at Newhalem 2	APR-SEP APR-JUL APR-JUN	1990 1660 1280	88 89 89			2350 1960 1510	1630 1360 1050	2264 1891 1442
RESER	VOIR STORAGE	(1000AF)	 	WATE	RSHED SNOWPACK	AMALYSIS	
RESERVOIR	USEABLE I CAPACITYI I		ABLE STOFAGE LAST YEAR A	I WATE	F:SHED	МО , COURSI AVG ' D	ES	YEAF AS % OF
ROSS	1404.1	703.9	466.0 29	1	it River	12	101	86
DIABLO RESERVOIR	90.6	86.6	85.0	I Bake	r River	0	0.	0
GORGE RESERVOIR	9.8	7.6	8.2	I Snoc	palmie River	2	115	95
		8		l I Sk.vk I	omish River	2	97	104

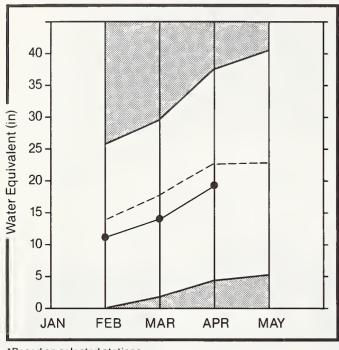
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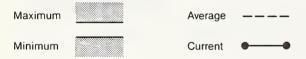
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OLYMPIC

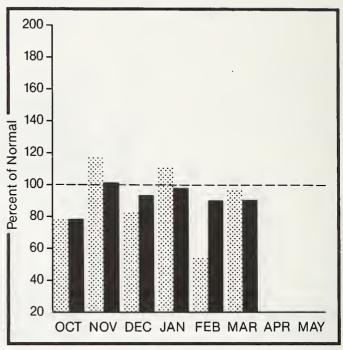
Mountain snowpack* (inches)



*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

OLYMPIC PENINSULA RIVER BASIN

OUTLOOK:

WATER SUPPLY The April 1 snow cover remained 77% of normal for the River and improved to 86% for the Elwha. Forecasts of runoff for streamflow in the basin are for 88% of average on the Dungeness River, 84% last month and 90% for the Elwah River. maximum recorded snowpack was at the Cox Valley snow where 99 inches of snow contained 36.0 Average water content at this site is 40.0 for April 1. March precipitation was 97% of with the Quillayute weather service office recording 10.03 inches of precipitation during March. The water year-to-date precipitation accumulation is normal. Temperatures were normal for March.

OLYMPIC PENINSULA RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FOFECAST	TROPA	MOST PROBABLE	HET SUBS.	DRY SUBS.	FEAS. MAX.	REAS.	25 YE. AVG.
FORECHS! FOIN!	PERIOD	(1000AF)		(1000AF)	(1000AF)		(1000AF)	(1000AF)
DUNGENESS RIVER or Sequim	APR-SEP	140	88	151	129	165	115	159
	APR-JUL	114	88	124	104	135	93	129
	APR-JUN	85	88	92	79	101	69	97
ELWHA RIVER or Port Angeles	APR-SEP	495	90	540	475	585	405	553
ELIMIT KIYEK III 1010 MIJETES	APR-JUL	415	91	440	390	490	340	454
	SERVOIR STORAGE USEABLE 1	** USEA	1000AF) BLE STORAG				THIS	YEAR AS % OF
RESERVOIR	CAPACITY 	THIS YEAR	LAST YEAR	AVG. I	ERSHED		RSES 'D LAST	YR. AVERAGE
				Dun	jeness River	1	82	77
		***		riors	se Creek	1	77	90
		43		E1wi	na River	1	97	86
		100						

WET SUBS, and DRY SUBS, represent 150 and 50 percent subsequent precipitation events respectively.

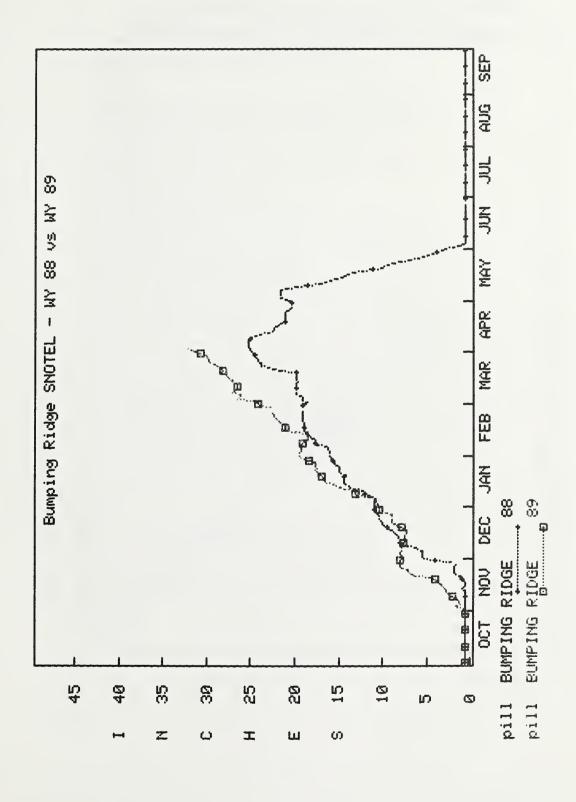
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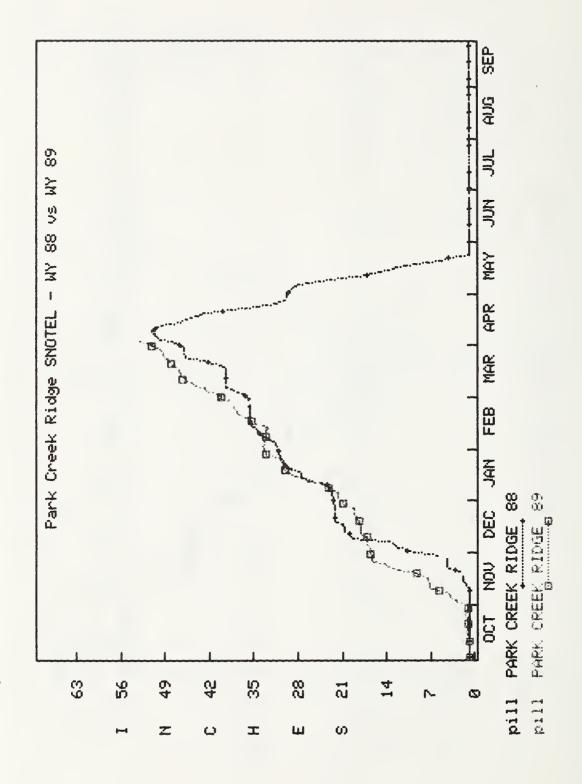
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APRIL 1989

SIGNED STATES AND STAT	SNOW COUPSE	ELEVATION			HATER CONTENT	LAST YEAR	AVERAGE 1961-85	SHOW COUPSE	ELEVATION	OATE		COHTENT	LAST YEAR	AVERA 1961-
MINISTRATE MIN	ENO OREILLE RIVER BEHTOH MEADOW	2370	3/30/89	13	4.4	.0	4.2	SOUILCHUCK CREEK						
SEMBLES RECORDS 500	BENTON SPRING	4920	3/30/89	57	19.6	13.2	19.4		4400	3/31/89	26	10.3	1.0	7.
SCHEALMAN 450 2029/89 44 15.1 12.2 14.1 19978 MICHAE 1400 2017/9 12 74.4 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	BUNCHGRASS MEADONS	5000	4/03/89	90	29.4	23.5	30.4							
According Acco	BUNCHGRASS MOMPILLO CNEMALAN		3/30/89											13.
MOOD SERIES 590 37/898 100 42.7 27.6 37.6	HEART LAKE TRAIL							YAKIMA RIUFR						
## STATES CALL STATES CALL STATES CALL STATES CALL STATES CALLED STATES	NOODOO CREEK	5900	3/28/89	120	42.2	37.8	47.8	AHTANUH R.S.						5.
Scheeling Solid														18
March 2007 1979 25 5.2 5.0 5.4 1.5										4/01/89		18.65	16.4	24
BERNES 1200 271/149 25 5-2 5-0 5-6		0200	0,2,,0,		1310	50.0		SUMPING LAKE (NEW)	3400	3/30/89		16.3		14 18
CHILLIAN 450 J. 250 J. 250 W. 63 J. 1. 1. 1. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		3220	3/31/89	25	8.2	5.0	5.6				44			85 17
1000 330 320-079 28 8.7 7.0 11.2 Files Like 2 FILLS 500 507-079 50.4 50.5 12.7 11.5 NORTH STATE 1.5 NORTH ST								CORRAL PASS PILLO	0000 W	4/01/89		39.35	36.8	37
LE SOUTH CALL STATE ALL ST						7.0		FISH LAKE PILLO	W 3370	4/01/89		30.45	33.7	32
SAMES CECTLE CALL SIGN STATE AND STA	TLE RIVER													3
DUTE EREK								GROUSE CAMP	5380	3/30/89	50	17.0	13.5	1
CART CAN 4100 400 400 15 14 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.			3/31/89											1
SONT CEETS:														5
SUMPTIOL CS. 400 2711/89 34 8.6 6.1 6.4 500 4711/89 37 1.9 510 200 4711/89 38 1.6 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	GOAT CREEK	3600	3/30/89	23	6.4	1.6	4.8	OLALLIE MEAOOWS	3630	3/30/89	109	47.8	39.9	4
TIMESPING CRIP 1.00														3
SUMMER AND RES CAN. 400 3/14/89 71 6.3 5.4 9.5 9.1 9.1 6.2 5.4 9.5 9.1 9.1 6.2 5.4 9.5 9.1 9.1 6.2 5.4 9.5 9.1 9.1 6.2 5.4 9.5 9.1 9.1 6.2 5.4 9.5 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1	TRAPPING CK LOW CAN	. 3050	4/01/89	9	2.8	1.0	3.5	TUNNEL AVENUE	2450	3/28/89	41	16.3	13.1	-
SUMBLY CALL SAME AND 373/079 19 5.6 3.0 4.7 WILL ROUGH STATE AND 400 373/079 22 37.1 5.0 7.1 WILL ROUGH STATE AND 400 373/079 22 14.1 17.2 23.7 WILL ROUGH STATE AND 400 373/079 22 14.1 17.2 23.7 WILL ROUGH STATE AND 400 373/079 22 14.1 17.2 23.7 WILL ROUGH STATE AND 400 373/079 22 14.1 17.2 23.7 WILL ROUGH STATE AND 400 373/079 22 14.1 17.2 23.7 WILL ROUGH STATE AND 400 4/07/07 44 12.1 13.5 13.6 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10														:
WASEDUCECEC CAN. 4600 3/278/9 21 5.0 5.7 6.4 AMERICANCE SHILLOW 5000 4/01/89 24.5 22.0 EVENT MICH EXCESS HILLOW 5000 4/01/89 24.5 22.0 EVENT MICH EXCESS HILLOW 5000 4/01/89 24.5 22.0 EVENT MICH EXCESS HILLOW 5000 4/01/89 24.7 22.0 EVENT MICH EXCESS HILLOW 5000 4/01/89 24.7 22.1 EVENT MICH EXCESS HILLOW 5000 4/01/89 24.7 22.1 EVENT MICH EXCESS HILLOW 5000 4/01/89 44.2 22.1 EVENT MICH EXCESS HILLOW 5000 4/01/89 45.5 5.1 EVENT MICH EXCESS HILLOW 5000 4/01/89 45.5 EVENT MICH EXCESS HILLOW 50	SUNDAY SUMMIT CAN	4300	3/30/89	19	5.6	3.0	4.7	ANTADIM COCCU						
MITTE FORCE PILLON 600 4701/89 42,95 31.2 53.9	VASEUX CREEK CAH	. 4600	3/29/89	21				AHTANUH R.S.				7.1	1.7	
MARTS PRILOW 6500 4/01/89 40.265 31.2 53.9 HILD HOLD FOR EACH FLLOW 5500 4/01/89 41.2 32.5 B.J. 21.1 B.J. 13.6 TORGET 12 FLLOW 5500 4/01/89 41.2 32.1 B.J. 13.6 TORGET 12 FLLOW 5500 4/01/89 41.2 32.1 B.J. 13.6 TORGET 12 FLLOW 5500 4/01/89 41.2 51.2 B.J. 13.6 TORGET 12 FLLOW 5500 4/01/89 41.2 B.J. 13.6 TORGET 12 FLLOW 5500 4/01/89 41	WHITE ROCKS HTM CAN				16.1	19.2			OH 6000				22.0	;
PRIST CEEKS 400 3/11/49 20 4.5 2.1 4.3 SALROW READORS - 11.00 400 4/11/49 - 10.55 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.3 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.0 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.05 6.0 10.0 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW ROUSE - 10.00 6/01/49 - 20.55 5.5 LEVIS AND COM-LITE PRISES SALROW	NARTS PASS FILLO							HIGH RIOGE PILL						:
SALMON ROS - PILLON 400 4/01/89 10.05 8.3 13.9	PUSTY CREEK	4000	3/31/89	20	6.5	2.1	6.4			4/01/89		44.3	32.1	
ALINE BESIN ALINE BESIN LITTLE ME AN 1200 402149 60.15 60.7 54.2 PRILOW STOP 470149 60.15 60.7 54.2 PRILOW STOP 470149 50.5 50.7 54.2 PRILOW STOP 470149 50.7 50.5 PRILOW STOP 470149 50.5 50.7 54.2 PRILOW STOP 470149 50.7 50.5 PRILOW STOP 470149 50.7 50.5 PRILOW STOP 470149 50.5 50.7 54.2 PRILOW STOP 470149 50.7 50.5 PRILOW STOP 470149 50.5 P										4/01/99		04.0F	50.0	
LYMAN LAKE FILLOW 5000 4/01/89 40.15 6.77 44. 68.6 4.2 FOTATO HILLOW 4500 4/01/89 20.25 25.5 LITTLE ROWS AND 5300 4/01/89 45.56 5 11/11/11/11/11/11/11/11/11/11/11/11/11/		H 4300	4/01/01		10.03	0.3	13.7	JUNE LAKE PILL	OH 3200	4/01/89		49.45		
LITTLE FROMS AN 5280 4/07/89 130 49.4 48.8 44.2 SHEEP CANYON PILLON 4000 4/01/89 45.58 s 5 SPECKE FROM PILLON 4000 4/01/89 25.5 25.7 PARK CK RIGGE FILLON 4000 4/01/89 49.55 55.1 44.8 SPIRIT LAKE FILLON 4000 4/01/89 13.45 58.3 SPIRIT LAKE FILLON 4000 4/01/89 13.45 58.8 SPIRIT LAKE FILLON 4000 4/01/89 39.35 34.8 SPIRIT LAKE FIL		W 5900	4/01/89		60.15	60.7	64.3							
PARK OR FOLLOW 400 400 400 400 400 400 70 70 70 13.45 55.1 44.8 SPIRIT LAWE FILLOW 3100 4701/89 13.45 3.4 5.3 1.4 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2	LITTLE HOWS A	H 5280	4/03/89		49.4			SNEEP CANYOH PILL	OH 4050	4/01/89		65.68		
THE PASS AND ALTER AND ALT						55.1	44.8							
THE PLANE 1600 4/01/89 1 1 1 - 2.7 2							46.3	STRAWBERRY L. PILL		4/01/89				
FORE RICK 1940 44 19.9 44 19.9 17.0 17.1	IAT RIVER							WHITE PASS E.S.	4500	4/01/89		19.6E	16.1	
STATE FIVE RECK 170 3/31/89 62 23.8 26.7 27.4 COMPAN TO STATE FIVE RECKET 170 3/31/89 62 23.8 26.7 27.4 COMPAN TO STATE FILL RECKET 170 3/31/89 62 23.8 26.7 27.4 COMPAN TO STATE FILL RECKET 170 3/31/89 62 23.8 26.7 27.4 COMPAN TO STATE FILL RECKET 170 3/31/89 62 3								WHITE PASS ES FILL	OH 4500	4/01/89		21.25	20.9	
EERN-RILL CREEK 3170 3731/89 3728/89 38 14.3 9.7 9.75.6 16.5 16									F200	4 (01 (00		04.05	50.0	
ELEMENT PASSIPILLON 4770 4/01/89 10.65 16.4 24.4 ROPE LIME PILLON 5400 4/01/89 54.35 REMINIARION ELICAN 5700 4/01/89 60.15 60.7 64.3 CREEN RIVER COUGAR HTM. PILLON 3200 4/01/89 32.35 20.4 REREITI 2140 3701 4/01/89 51 17.9 17.2 GRESS HOUNTERN ELICAN 5700 4/01/89 32.35 20.4 RISSION RIOGE 5000 3/11/89 51 17.9 17.2 GRESS HOUNTERN ELICAN 5700 4/01/89 22.35 20.4 RISSION RIOGE 5000 3/01/89 51 17.9 17.2 GRESS HOUNTERN ELICAN 5700 4/01/89 19.0 10.0 STEVEN FASS SPILLON 4070 4/01/89 10.05 13.7 34.6 SAMPLL RIOGE 4700 4/07/89 19 47 3 2.0 STEVEN FASS SPILLON 4070 4/01/89 19.0E 15.2 22.6 TURN FASS SPILLON 38.00 4/01/89 40.0 32.7 32.0 SAMPLL RIOGE FASS PILLON 4070 4/07/89 62 24.0 25.0 35.1 LOOKOUT 5140 3/30/89 146 47.3 41.6 57.3 CLOST LAKE 6110 4/07/89 83 32.4 21.0 33.5 SINSET 5540 4/07/89 83 32.4 21.0 33.5 SINSET 5540 4/07/89 83 32.4 21.0 33.5 SHOWLAR FERRE FULLON 4700 4/01/89 25.7 COORDINATIVE ALL FRANCE CAN. 4300 3/30/89 19 44.6 27.8 CREEN RIVER 680 3400 3/30/89 40 30.6 33.8 CREEN RIVER 680 3400 3/30/89 19 44.6 27.8 CREEN RIVER 680 3400 3/30/89 19 44.6 27.8 CREEN RIVER 680 3/30/89 20 5.4 3.3 6.1 CREEN RIVER 680 3400 3/30/89 19 44.6 27.8 CREEN RIVER 680 370 370 370 370 370 370 370 370 370 37		3170	3/31/89	62	23.8	26.7	27.4			3/28/89	103	37.8		
CRIMARING C.S. 2500 3/31/89 21 7.8 4.7 9.4													36.8	
RERRITY 2140 3/31/89 21 8.6 7.2 13.7 COUGAR PITA FILLON 3200 4/01/89 32.35 20.6 RESSION RIDE 500 3/31/89 31 17.9 12.2 CASS MOUNTAIN \$12 22.00 4/09/89 67 32.0 25.0 STEVERS PASS SAND 50 3700 3/31/89 33 30.1 33.7 34.6 LTAN LAKE 4000 4/01/89 40.05 25.0 STEVERS PASS SAND 50 3700 3/31/89 32 12.4 1.7 7.3 COUGAR FILLON 3200 4/07/89 32 12.4 1.7 7.3 LOOKOUT 5140 3/30/89 82 22.6 25.0 35.1 LOOKOUT 5140 3/30/89 82 22.6 25.0 35.1 LOOKOUT 5140 3/30/89 81 26.0 27.7 27.1 SUNSET 3200 4/07/89 93 32.4 21.0 33.5 SUNSET 5540 4/07/89 83 32.4 21.0 33.5 SUNSET 5540 4/07/89 83 32.4 21.0 33.5 SUNSET 5540 4/07/89 83 32.4 21.0 33.5 SUNSET 5540 4/07/89 84 36.6 25.7 COUGARTZ PEAK FILLON 4700 4/01/89 25.7 COUGARTZ PEAK FILLON 47	CNIWAUKUM G.S.	2500	3/31/89	21	7.8	4.7	9.4		UN 3100			55.55		
HISSIDE RIONE STUCKE PAGE SAND 90 3/31/89 51 17.9 12.2 CRASS MOUNTAIN \$12 200 4/09/89 17 8.0 STUCKE PAGE SAND 90 3/30/89 83 30.1 33.7 34.6 LESTEK EREK 31.00 4/09/89 67 22.6 25.0 35.1 CRASS MOUNTAIN \$1.00 4/09/89 67 22.6 25.0 34.6 LESTEK PAGE SAND 90 4/01/89 48.6 5 48.00 EMBKE 4 100 4/01/89 19.0 15.2 22.6 TINH CARE 4000 4/01/89 48.6 5 48.00 EMBKE 5 100 4/01/89 19.0 15.2 22.6 TINH CARE 5 100 4/01/89 48.6 5 48.00 EMBKE 5 100 4/01/89 48.6 5 48.0 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.3 41.6 59.5 EMBKE 5 100 4/01/89 18 69 47.7 40 47.7 41.1 18.3 10.7 EMBKE 5 100 4/01/89 18 69 47.7 41.1 18.3 10.7 EMBKE 5 100 4/01/89 18 69 47.7 41.1 18.3 10.7 EMBKE 5 100 4/01/89 18 69 47.7 41.1 18.3 10.7 EMBKE 5 100 4/01/89 19 41.1 121.6 EMBKE 5 100 4/01/89 19 41.1 121.6 EMBKE 5 100 4/01/89 18 30.1 31.7 EMBKE 5 100 4/01/89 19 41.1 121.6 EMBKE 5 100 4/01/89 19 40 4/01									OH 3200	4/01/89		32.35	20.6	
STEVENS PASS SAND SO 3700 3/31/89 83 30.1 33.7 34.6	MISSION RIOGE	5000	3/31/89	51	17.9	12.2		GRASS HOUNTAIN #2	2900				25.0	
ANDE PLUYER 4 100 4/01/89 19.0E 15.2 2.2.6 17LIT CAPP 4100 4/09/89 65 29.0 28.0 28.0 EDROW EDRINE 4100 3/30/89 32 21.4 1.7 7.3 EDROW EDRINE 5100 3/30/89 32 22.40 25.0 35.1 ECOAR RIVER LOST LAKE 6110 3/30/89 146 47.3 41.6 59.3 ECOAR RIVER LOST LAKE 6110 3/30/89 77 39.0 27.2 38.2 P.T. CAPPEN 300 3/28/89 38 17.6 8.5 P.T. CAPPEN 300 3/28/89 38 17.6 8.5 P.T. CAPPEN 300 3/28/89 78 18.3 10.7 P.T. CAPPEN 300 3/28/89 98 18.8 7.7 12.1 P.T. CAPPEN 300 3/28/89 99 18.4 18.3 10.7 P.T. CAPPEN 300 3/28/89 99 18.8 17.6 8.5 P.T. CAPPEN 300 3/28/89 99 18.4 18.3 10.7 P.T. CAPPEN 300 3/28/89 99 19 44.6 29.8 P.T. CAPPEN 300 3/28/89 96 41.1 21.6 P.T. CAPPEN 300 3/28/89 97 44.6 P.T. CAPPEN 300 3/28/89 96 41.1 21.6 P.T.								LYNN LAKE			7 67	32.0		
SECURE 4100 4/01/89 19.0E 15.2 22.4 TATH CAMP 4100 4/09/89 65 29.0 28.0 79.	ANE DINEO													
LOCKOUT 5140 J/30/69 82 26.0 25.0 35.1 CECAR RIVER LOST LAKE 6110 3/30/69 97 39.0 27.2 38.2 NT. CARRIVER LOST LAKE 610 3/30/69 97 39.0 27.2 38.2 NT. CARRIVER SEMENTH 3200 3/30/69 48 18.8 7.7 12.1 SUMSET 5540 4/07/69 83 32.4 21.0 33.5 SMOUDLAITE RIVER SUMSET 5540 4/07/69 83 32.4 21.0 33.5 SMOUDLAITE RIVER MAN LAKE 010/67 8 83 32.4 21.0 33.5 SMOUDLAITE RIVER MAN LAKE 010/67 8 83 32.4 21.0 33.5 SMOUDLAITE RIVER MAN LAKE 010/67 8 83 32.4 21.0 33.5 SMOUDLAITE RIVER MAN LAKE 010/67 8 9 144.6 29.8 OLARLI EMEROUNS 3830 3/30/69 109 47.8 39.9 OLARLI EMEROUNS ALIVER MAN LAKE 010/67 8 9 20 5.4 3.3 6.1 STEVENS PASS PILLON 4070 4/01/69 50.95 49.6 OLARLI EMEROUNS ALIVER MAN LAKE 010/67 8 9 30.1 33.3 6.1 STEVENS PASS PILLON 4070 4/01/69 50.95 49.6 OLARLI EMEROUNS ALIVER MAN LAKE 010/67 8 9 30.1 33.3 6.1 STEVENS PASS PILLON 4070 4/01/69 50.95 49.6 OLARLI EMEROUNS ALIVER MERIODA BILDE CAM. 4000 3/30/69 84 30.6 33.8 STEVENS PASS SAND 50 3/30/89 83 30.1 33.7 SEMENDA SAND SAND SAND SAND SAND SAND SAND S	ABOVE BURKE					15.2							28.0)
LOST LAKE 4110 3/30/89 146 47.3 41.6 59.3 CITY CABIN 2390 3/28/89 38 17.6 8.5 NOSOUTO FIDEE 5200 4/07/89 97 37.9.0 27.2 38.2 N. NOSOUTO FIDEE 5200 4/07/89 83 32.4 21.0 33.5 NOSOUTO FIDEE 52.0 4/07/89 90 44.6 29.8 NOSOUTO FIDEE 52.0 4/03/89 96 41.1 21.6 NOSOUTO FIDEE 52.0 FI	FOURTH OF JULY SUN LOOKOUT							CFOAR RIVER						
SHERITH 3200 3/30/89 48 18.8 7.7 12.1 SUMSET 5540 4/07/89 83 32.4 21.0 33.5 SHOUGHLTE RIVER KFOHONA MINE 2600 4/03/89 99 44.6 29.8 MIN LAKE OURRY PEAK PILLOW 4700 4/01/89 25.7 SUMBET SEVEN PASS SAME SEVEN PASS PILLOW 4700 4/01/89 50.95 49.6 MIN LAKE CAN. 4300 3/30/89 109 47.8 39.9 MIN LAKE CAN. 4300 3/30/89 109 40.0 MIN LAKE CAN. 4300 3/30/89 100 40.0 MI	LOST LAKE	6110	3/30/89	146	47.3	41.6	59.3	CITY CABIN						
SUMSET 5540 4/07/89 83 32.4 21.0 33.5 SHOUDLATTE RIVER KPOHONA HINE 2600 4/03/89 99 44.6 29.8 IAN LAKE OURLY PASK PILLOW 4700 4/01/89 25.7 ST.								HT. GARONER	3300	3/28/89	41	18.3	10.7	
IMALLAKE OUARTZ PEAK FILLOW 4700 4/01/89 25.7 OLALITE KEAOONS 3630 3/30/89 109 47.8 39.9 OUARTZ PEAK FILLOW 4700 4/01/89 25.7 OLALITE KEAOONS 3630 3/30/89 96 41.1 21.6 NOGAM RIVER ABERGEEN LAKE CAN. 4300 3/30/89 20 5.4 3.3 6.1 STEVENS PASS PILLOW 4070 4/01/89 50.95 49.6 BLACKWALL PEAK CAN. 6370 4/04/89 84 30.6 33.8 STEVENS PASS PILLOW 4070 3/31/89 83 30.1 33.7 BROOKHERE CAN. 3200 3/31/89 26 7.6 6.4 8.6 13.0 BROOKHERE CAN. 2000 3/31/89 109 26 7.6 6.4 8.6 13.0 BROOKHERE CAN. 4200 3/31/89 109 37.3 39.1 38.6 BEAVER DEEK REAL 200 3/31/89 17 8.1 9.0 ESPERON CK, LO CAN. 4400 4/01/89 37 11.0 7.9 12.0 BEAVER PASS 3 3680 3/30/89 55 25.4 28.2 ESPERON CK, LO CAN. 4400 4/01/89 37 11.0 7.9 12.0 BEAVER PASS 3 3680 3/30/89 55 25.4 28.2 ESPERON CK, UP CAN. 5410 4/01/89 50 15.7 13.7 18.7 0EVILS PARK 5900 3/30/89 95 36.4 36.0 ESPERON CK, UP CAN. 5410 4/01/89 50 15.7 13.7 18.7 0EVILS PARK 5900 3/30/89 95 36.4 36.0 EREIBACK RES CAN. 5120 3/30/89 32 8.1 5.7 9.1 FREEZEOUT CK, TRAIL 3500 3/31/89 22 10.0 10.6 NARTS PASS PILLOW 6500 4/01/89 42.95 31.2 53.9 HARTS PASS PILLOW 6500 4/01/89 42.95 31.2 53.9 LOST HORSE RITN CAN. 4200 3/31/89 35 8.7 6.2 9.5 LOST HORSE RITN CAN. 4200 3/31/89 35 8.7 6.2 9.5 LOST HORSE RITN CAN. 4200 3/31/89 35 8.7 6.2 9.5 LOST HORSE RITN CAN. 4200 3/31/89 20 5.7 7.5 5.6 6.7 LYMAN LAKE CAN. 5000 3/29/89 31 9.4 5.7 9.4 HISSION CREEK CAN. 5000 3/29/89 31 9.4 5.7 9.4 HISSION CREEK CAN. 5000 3/31/89 20 5.7 5.5 5.6 7 LYMAN LAKE CAN. 5000 3/31/89 20 5.7 5.5 5.6 7 LYMAN LAKE CAN. 5000 3/31/89 20 5.7 5.5 5.6 7 LYMAN LAKE CAN. 5000 3/31/89 60 20.0 26.3 20.4 HEADONS CAREIN 1900 3/31/89 13 5.8 18.0 HISSION CREEK CAN. 5000 3/31/89 20 5.7 7.5 5.6 6.7 LYMAN LAKE CAN. 5000 3/31/89 20 5.7 7.5 5.6 6.7 LYMAN LAKE CAN. 5000 3/31/89 20 5.7 7.5 5.6 6.7 LYMAN LAKE CAN. 5000 3/31/89 60 20.0 26.3 20.4 HEADONS CAREIN 1900 3/31/89 13 5.8 3.3 HISSION CREEK CAN. 5000 3/31/89 20 6.5 2.1 6.4 SALHON HOUSD PELLOW 6000 3/31/89 79 27.1 24.2 29.2 SALHON HEADONS AND 3/31/89 79 27.1 24.2 29.2 ELWAN RIVER									2/00	4/40/00		44.1	20.0	
OUARTZ PEAK PTILLON 4700 4/01/89 25.7 OLNEY PASS 3250 4/03/89 96 41.1 21.6								OLALLIE HEAOOHS	3630	3/30/89	109	47 • 8	39.9	
ABERDEEN LAKE CAN, 4300 3/30/89 20 5.4 3.3 6.1 STEVENS PASS FILLOW 4070 4/01/89 50.95 49.6 BELACKWALL FLAK CAN, 4070 4/04/99 84 30.6 33.8 STEVENS PASS SAMO SO 3/31/89 83 30.1 33.7 ERENOA MINE CAN, 4800 3/30/89 42 12.6 8.8 13.0 SEVENS PASS SAMO SO 3/30 3/31/89 83 30.1 33.7 ENGEROA MINE CAN, 4800 3/31/89 105 37.3 39.1 38.6 SEACIT FIVER CAN, 4000 3/31/89 105 37.3 39.1 38.6 SEACIT FIVER CAN, 4000 4/01/89 37 11.0 7.9 12.0 SEACEN FROM TOP AN 6000 3/30/89 55 25.4 28.2 SEACIT FIVER CAN, 4000 4/01/89 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 55 25.4 28.2 SEACIT FIVER CAN, 4000 4/01/89 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 36.0 SEACIT FIVER CAN, 4000 4/01/89 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 36.0 SEACIT FIVER CAN, 4000 4/01/89 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 36.0 SEACIT FIVER CAN, 4000 4/01/89 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 36.0 SEACIT FIVER CAN, 4000 4/01/89 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 36.0 SEACIT FIVER CAN, 5410 40/189 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 36.0 SEACIT FIVER CAN, 5410 40/189 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 36.0 SEACIT FIVER CAN, 5410 40/189 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/30/89 95 30.4 40.4 36.0 SEACIT FIVER CAN, 5410 40/189 40 13.9 11.7 15.5 SEACH TOP AN 6000 3/31/89 38 15.8 18.0 NARTS FASS FILLOW 4500 4/01/89 40 4/01/89 40 4/01/89 40 15.1 SEACH TOP AN 6000 4/01/89 40 4/01/89		H 4700	4/01/89		25.7								21.6	
BLACKWALL FEAK CAN, 4070 4/04/89 B4 30.6 33.8 STEVENS PASS SAMO S0 3/31/89 B3 30.1 33.7 BERNON HINE CAN, 4800 3/30/89 42 12.6 8.8 13.0 SEAGNA HINE CAN, 4800 3/31/89 105 37.3 39.1 38.6 BEAVER FREE TRAIL 2200 3/31/89 17 8.1 9.0 ENGREY CAN, 6200 3/31/89 105 37.3 39.1 38.6 BEAVER FREE TRAIL 2200 3/31/89 17 8.1 9.0 ESPERON CK, LO CAN, 4400 4/01/89 37 11.0 7.9 12.0 BEAVER PASS 3860 3/30/89 55 25.4 28.2 ESPERON CK, LO CAN, 4500 4/01/89 37 11.0 7.9 12.0 BEAVER PASS 3860 3/30/89 55 25.4 28.2 ESPERON CK, UP CAN, 510 4/01/89 30 15.7 13.7 18.7 17.5 EROWH TOP AN 6000 3/30/89 95 36.4 36.0 GETYBACK RES CAN, 510 4/01/89 30 15.7 13.7 18.7 19.7 18.7 0EVILS PARK 5900 3/30/89 95 36.4 36.0 GETYBACK RES CAN, 5100 4/01/89 30 15.7 10.8 15.1 GRANITE CREEK 3500 3/31/89 22 10.0 10.6 NARTS PASS PILLON 4500 4/01/89 42.9S 31.2 53.9 HARTS PASS PILLON 4500 4/01/89 42.9S 31.2 53.9 HARTS PASS PILLON 4500 4/01/89 42.9S 31.2 53.9 HARTS PASS PILLON 4500 4/01/89 42.9S 31.2 13.1 13.4 13.5 13.5 13.4 13.5 13.5 13.4 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	NOGAN RIVER				_				A11	A				
BERDON HINE CAN, 4800 3/30/89 42 12.6 8.8 13.0 SKAGII PIVER ENDEREY CAN, 3200 3/31/89 105 37.3 39.1 38.6 BEAVER CREEK TRAIL 2200 3/31/89 17 8.1 9.0 ESPERON CK, LO CAN, 4400 4/01/89 37 11.0 7.9 12.0 BEAVER PASS 3860 3/30/89 55 25.4 28.2 ESPERON CK, HOI CAN, 4400 4/01/89 46 13.9 11.7 15.5 EROMH TOP AM 6000 3/30/89 95 36.4 36.0 ESPERON CK, HOI CAN, 4510 4/01/89 50 15.7 13.7 18.7 GEVILS PARK 5900 3/31/89 72 10.0 10.6 ENTER PASS 18.1 10.0 11.6 ENTER PASS 18.1 1														
ENDERRY CAN, 4200 3/31/89 105 37.3 99.1 38.6 BEAVER DEFEX TRAIL 2200 3/31/89 17 8.1 9.0 ESPERON CK, LO CAN, 4400 4/01/89 37 11.0 7.9 12.0 BEAVER PASS 360 3/30/89 55 25.4 28.2 ESPERON CK, UP CAN, 5410 4/01/89 46 13.9 11.7 15.5 EKOMH TOP AH 6000 3/30/89 13 53.4 53.4 ESPERON CK, UP CAN, 5410 4/01/89 50 15.7 13.7 18.7 DEVILS PARK 5900 3/30/89 95 36.4 36.0 ESPERON CK, UP CAN, 5410 4/01/89 50 15.7 13.7 18.7 DEVILS PARK 5900 3/30/89 95 36.4 36.0 ESPERON CK, UP CAN, 5410 4/01/89 50 15.7 13.7 18.7 DEVILS PARK 5900 3/31/89 92 10.0 10.6 NANILION NILL CAN, 4890 3/31/89 46 15.7 10.8 15.1 ERECTOR CK, 110 ERECTOR	ERENDA MINE CAN	. 4800	3/30/89	42	12.6		13.0							
ESPERON CK. LO CAN. 4400 4/01/89 37 11.0 7.9 12.0 EEAVER PASS 3880 3/30/89 55 75.4 28.2 ESPERON CK. LO CAN. 4400 4/01/89 46 13.9 11.7 15.5 EROWH TOP AM 6000 3/30/89 95 36.4 36.0 CREIBACK RES CAN. 5120 3/30/89 32 8.1 5.7 13.7 18.7 OEVILS PARK 5900 3/30/89 95 36.4 36.0 OEVILS PARK 5900 3/30/89 95 36.4 36.0 OEVILS PARK 5900 3/30/89 95 36.4 36.0 OEVILS PARK 5900 3/31/89 22 10.0 10.6 NARITS PASS PILLON 6500 4/01/89 42.99 31.2 53.9 HARTS PASS PILLON 6500 4/01/89 42.99 31.2 6.6 6 3.7 7.6 KLESILKWA CAN. 3710 4/04/89 37 14.6 10.5T MORSE NTN CAN. 6300 4/03/89 35 8.7 6.2 9.5 LIGHTNIC LAKE CAN. 3710 4/04/89 37 14.6 10.5T MORSE NTN CAN. 6300 3/31/89 35 8.7 6.2 9.5 LIGHTNIC LAKE CAN. 3710 4/04/89 37 14.6 10.5T MORSE NTN CAN. 6300 3/31/89 35 8.7 6.2 9.5 LIGHTNIC LAKE CAN. 3710 4/04/89 40.15 60.7 HISSEQULA NTN CAN. 5090 3/27/89 31 9.4 5.7 9.4 HARDONG CARITH 1900 3/31/89 13 5.8 3.3 HISSEQULA NTN CAN. 5090 3/27/89 43 14.1 12.1 14.0 PAINTY PASS PILLON 7800 4/01/89 34.85 38.3 HIDTON CREEK 61 5700 3/31/89 42 20.0 26.3 20.4 HEADONG CARITH 1900 3/31/89 20 9.2 10.3 HIDTON CREEK 61 5700 3/31/89 25 6.2 4.3 7.0 DINGERES RIVER 61 5700 3/31/89 25 6.2 4.3 7.0 DINGERES RIVER 61 5700 3/31/89 20 8.5 2.1 6.4 5.4 5.4 5.5 5.4 5.4 5.4 5.5 5.5 5.5 5		. 6200	3/31/89	105		39.1	38.6							
ESPERDI CK. UP CAN. 5410 4/01/89 50 15.7 13.7 18.7 0EVILS PARK 5900 3/30/89 95 36.4 36.0 0EVILS PARK 5900 3/31/89 95 36.4 36.0 0EVENDAR FREEZEUOT CK. TRAIL 3500 3/31/89 22 10.0 10.6 NARITION NILL CAN. 4890 3/31/89 46 15.7 10.8 15.1 GRAHITE CREEK 3500 3/31/89 38 15.8 18.0 NARITS PASS PILLON 4500 4/01/89 42.95 31.2 53.9 HARTS PASS PILLON 4500 4/01/89 42.95 31.2 53.9 HARTS PASS PILLON 4500 4/01/89 42.95 31.2 53.9 HARTS PASS PILLON 4500 4/01/89 42.95 31.2 15.1 ORGANITE CREEK 4.0 0.0 1/0.89 1.0 10.6 NARITS PASS PILLON 4500 4/01/89 42.95 31.2 15.1 ORGANITE CREEK 5.0 10.3 10.3 10.5 ORGANITE CREEK 5.0 10.3 10.5 ORGANITE CREEK 5.0 10.5 ORGANITE	ESPERON CK. LO CAN	. 4400	4/01/89	37	11.0	7.9	12.0	BEAVER PASS	3480	3/30/89	7 55			
NAMITION MILL CAN, 4890 3/31/89 46 15.7 10.8 15.1 CRANITE CREEK 3500 3/31/89 38 15.8 18.0 NAMITS PASS PILLON 6500 4/01/89 42.95 31.2 53.9 HARTS PASS PILLON 6500 4/01/89 42.95 31.2 151NTOK LAKE CAN, 5500 3/29/89 26 6.6 3.7 7.6 KLESIKNA CAN, 3710 4/04/89 37 14.6 10.05T NORSE NTN CAN, 6300 4/03/89 35 8.7 6.2 9.5 LIGHTNING LAKE CAN, 4000 3/30/89 29 10.1 MISSEQULA MIN CAN, 5500 3/31/89 20 5.7 5.5 6.7 LYMAN LAKE PILLON 5000 4/01/89 40.15 40.7 MISSEQULA MIN CAN, 5500 3/29/89 31 9.4 5.7 9.4 MEADONS CABIH 1900 3/31/89 13 5.8 3.3 MISSIGN CREEK CAN, 8500 3/31/89 42 20.0 26.3 20.4 MEN MOZOMER LAKE 2800 3/31/89 20 9.2 10.3 MONASHE PASS CAN, 4500 3/29/89 43 14.1 12.1 14.0 MEN MOZOMER LAKE 2800 3/31/89 20 9.2 10.3 MONASHE PASS CAN, 4500 3/31/89 44 11.1 11.1 12.9 THUNDER BASIN 2400 3/30/89 61 23.4 22.4 MINTON CREEK SI 5700 3/31/89 46 12.1 13.5 13.6 UNITON CREEK SI 5700 3/31/89 25 6.2 4.3 7.0 OUNCENESS RIVER FOSTILL LAKE CAN, 4400 3/31/89 25 6.2 4.3 7.0 OUNCENESS RIVER CAN, 4400 3/31/89 25 6.2 4.3 7.0 OUNCENESS RIVER CAN, 4400 3/31/89 20 9.5 6.7 4 10.0 MEN MOZOMER LAKE CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON MEN PILLON CAN, 4400 3/31/89 20 6.5 2.1 6.4 SALHON	ESPERON CK. UP CAN	. 5410	4/01/89	50	15.7	13.7	18.7	OEVILS PARK	5900	3/30/89	95	36.4	36.0	
NARTS PASS PILLON 6500 4/01/89 42.95 31.2 53.9 HARTS PASS PILLON 6500 4/01/89 42.95 31.2 ISINION LARKE CAH. 5500 3/29/89 26 6.66 3.7 7.6 KLESTINVA CAH. 3710 4/04/89 37 14.6 LOST HORSE HTN CAN. 6300 4/03/89 35 8.7 6.2 9.5 LIGNTNING LAKE CAH. 4000 3/30/89 29 10.1 40.15 60.7 KLESTINVA CAH. 3710 4/04/89 40.15														
LOST MARSE NTN CAN, 4300 4/09/89 35 8.7 6.2 9.5 LIGNTNING LAKE CAN, 4000 3/30/89 29 10.1 RCCULLOR CAN, 4200 3/31/89 20 5.7 5.5 6.7 LYMAN LAKE PILLON 5900 4/01/89 60.15 60.7 MISSEZULA NTN CAN, 5090 3/29/89 31 9.4 5.7 9.4 HEADONS CABIN 1900 3/31/89 13 5.8 3.3 MISSION CREEK CAN, 5800 3/31/89 62 20.0 26.3 20.4 MEM HOZDREEN LAKE 2800 3/31/89 20 9.2 10.3 MISSEZULA NTN CAN, 5900 3/31/89 43 14.1 12.1 14.0 PAINT PASS PILLON 4780 4/01/89 34.85 38.3 MISSION CREEK S1 5700 3/31/89 44 11.1 11.1 12.1 12.9 THUNGER BASIN 2400 3/30/89 61 23.4 22.4 MIT KOBBAU CAN, 5900 3/27/89 44 11.1 11.1 12.9 THUNGER BASIN 2400 3/30/89 61 23.4 22.4 MIT KOBBAU CAN, 5900 3/27/89 44 11.1 11.1 12.9 THUNGER BASIN 2400 3/30/89 61 23.4 22.4 MIT KOBBAU CAN, 4000 3/31/89 25 6.2 4.3 7.0 MIT CAN LAKE CAN, 4400 3/31/89 25 6.2 4.3 7.0 MIT CAN LAKE CAN, 4400 3/31/89 25 6.2 4.3 7.0 MIT CAN LAKE CAN, 4500 3/31/89 20 6.5 2.1 6.4 MIT CAN LAKE CAN, 4500 3/31/89 20 6.5 2.1 6.4 MIT CAN LAKE CAN, 4500 3/31/89 20 8.0 7.4 10.0 MEMBER CREK MIT CREEK SALHON MEMOUS PILLON MEMOUS SALHON MEMOUS PILLON MEMOUS PILLON MEMOUS SALHON MEMOUS PILLON	NARTS PASS PILLO	H 6500	4/01/89		42.95	31.2	53.9	HARTS PASS PILL	.0W 6500	4/01/89		42.95	31.2	
MCCULOCN CAH, 4200 3/31/89 20 5.7 5.5 6.7 LYHAN LAKE PILLOW 5900 4/01/89 60.1S 60.7	LOST HORSE MTN CAN		4/03/89	35		6.2	9.5		H. 4000	3/30/89	9 29	10.1		
HISSION CREEK CAN, \$500 3/31/89 62 20.0 26.3 20.4 HEW HOZOMEREN LAKE 2800 3/31/89 20 9.2 10.3 NHT MONASHEE PASS CAN, \$500 3/27/89 43 14.1 12.1 14.0 PAINY PASS PILLON 4780 4/01/89 34.85 38.3 NHT, KOBAU CAN, \$500 3/27/89 44 11.1 11.1 12.9 THUNDER BASIN 2400 3/30/89 61 23.4 22.4 NHTTON CREEK \$1 5700 3/31/89 29 8.7 7.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$400 3/31/89 29 8.7 7.4 9.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$4500 3/31/89 29 8.7 7.4 9.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$4500 3/31/89 29 8.7 7.4 9.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$4500 3/31/89 29 8.7 7.4 9.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$4500 3/31/89 29 8.7 7.4 9.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$4500 3/31/89 29 8.7 7.4 9.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$4500 3/31/89 29 8.7 7.4 9.0 OUNGENESS RIVER FOSTILL LAKE CAN, \$4500 3/31/89 30 8.0 7.4 10.0 OUNGENESS RIVER FOSTILL WAS AND	MCCULLOCN CAH	4200	3/31/89	20		5.5		LYMAN LAKE PILL	.OH 5900	4/01/89	9			
HOMASHEE PASS CAN, 4500 3/29/89 43 14.1 12.1 14.0 FAINY PASS PILLON 4780 4/01/89 34.85 38.3 H.T. KOBAU CAN, 500 3/27/89 44 11.1 11.1 12.9 THUNDER BASIN 2400 3/30/89 61 23.4 22.4 HUTTOH CREEK \$1 5700 3/31/89 25 6.2 4.3 7.0 OUNGENESS RIVER FOSTILL LAKE CAN, 4400 3/31/89 25 6.2 4.3 7.0 OUNGENESS RIVER FOSTILL LAKE CAN, 500 3/31/89 20 6.5 2.1 6.4 SALHON HEADONS 4500 3/31/89 20 6.5 2.1 6.4 SALHON HEADONS 1500 3/31/89 20 6.5 2.1 6.4 SALHON HEADONS 1500 3/31/89 30 8.0 7.4 10.0 HORSE CREEK SALHON HEADONS 1500 3/27/89 79 27.1 24.2 29.2 ELWAR RIVER	MISSION CREEK CAN	5800	3/31/89	62	20.0	26.3	20.4	HEW HOZOMEEN LAKE	2800	3/31/89	9 20	9.2	10.3	3
HUTTON CREEK \$1 5700 3/31/89 46 12.1 13.5 13.6 OTAHA LAKE CAN, 4400 3/31/89 25 6.2 4.3 7.0 OTAHA LAKE CAN, 4500 3/31/89 29 8.7 7.4 9.0 OTAHA LAKE CAN, 4500 3/31/89 20 8.5 2.1 6.4 RUSTY CREEK 4000 3/31/89 20 8.5 2.1 6.4 SALHON HOUS PILLON 4500 3/31/89 30 8.0 7.4 10.0 SALHON HOUS PILLON 4500 4/01/89 10.0S 8.3 13.9 SILVER STAP MIN CAN, 6000 3/27/89 79 27.1 24.2 29.2 ELWAR RIVER														
FOSTILL LAKE CAN. 4500 3/31/89 29 8.7 7.4 9.0 0EER PARK 5200 4/02/89 53 16.7 20.3 RUSTY CREEK 4000 3/31/89 20 6.5 2.1 6.4 SALHON HEADOWS 5500 3/31/89 30 8.0 7.4 10.0 HORSE CREEK SALHON HOWS PILLOW 4500 4/01/89 10.0S 8.3 13.9 COX VALLEY 4500 3/29/89 99 36.0 46.8 SILVER STAP MIN CAN. 6000 3/27/89 79 27.1 24.2 29.2	MUTTON CREEK #1	5700	3/31/89	46	12.1	13.5	13.6		2,,,,		٠.			
RUSTY CREEK 4000 3/31/89 20 6.5 2.1 6.4 SALHON HEADOURS 4300 3/31/89 30 8.0 7.4 10.0 HORSE CREEK SALHON HOWS PILLOW 4500 4/01/89 10.05 8.3 13.9 COX VALLEY 4500 3/29/89 99 36.0 46.8 SILVER STAP HTN CAN. 6000 3/27/89 79 27.1 24.2 29.2 ELWAR RIVER									5200	4/02/8	9 53	16.7	20.3	3
SALHON HOWS PILLON 4500 4/01/89 10.0S 8.3 13.9 COX VALLEY 4500 3/29/89 99 36.0 46.8 SILVER STAP MTN CAN. 6000 3/27/89 79 27.1 24.2 29.2 ELWAR RIVER	RUSTY CREEK	4000	3/31/89	20	6.5	2.1	6.4							
ELWNA RIVER	SALHON HOWS PILLO	W 4500	4/01/89		10.05	8.3	13.9		4500	3/29/8	9 99	36.0	46.6	3
HUPRICAHE 4500 3/28/89 61 19.8 22.8	SILVER STAR MTN CAN	6000	3/27/89	79	27.1	24.2	29.2							





The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

Canada: Ministry of the Environment, Water

Investigations Branch, Victoria, British Columbia

States: Washington State Department of Ecology

Washington State Department of Natural Resources

Federal: Department of the Army

Corps of Engineers

U.S. Department of Agriculture

Forest Service

U.S. Department of Commerce NOAA, National Weather Service U.S. Department of the Interior Bonneville Power Administration

Bureau of Reclamation Geological Survey National Park Service Bureau of Indian Affairs

Local: City of Tacoma

City of Seattle

Chelan County P.U.D.

Pacific Power and Light Company Puget Sound Power and Light Company Washington Water Power Company

Snohomish County P.U.D. Colville Confederated Tribes

Spokane County

Private: Okanogan Irrigation District

Wenatchee Heights Irrigation District Newman Lake Homeowners Association

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged. UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE ROOM 360, U.S. COURT HOUSE SPOKANE, WASHINGTON 99201

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and

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